



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,125	09/19/2001	Kohji Numata	Q66262	8416
7590 06/25/2008 SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC 2100 Pennsylvania Avenue, N.W. Washington, DC 20037-3202				
EXAMINER CHOWDHURY, NIGAR				
ART UNIT 2621		PAPER NUMBER		
MAIL DATE 06/25/2008		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/955,125

Applicant(s)

NUMATA, KOHJI

Examiner

NIGAR CHOWDHURY

Art Unit

2621

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/IC)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/02/2008 has been entered.

Response to Arguments

1. Applicant's arguments filed on 04/02/2008 have been fully considered but they are not persuasive.
2. In re page 17-18, applicant argues that Faroudja discloses a playback device which recovering a progressively scanned signal from a DVD but fails to disclose acquiring a scanning line number from a range of scanning lines being scanned on a display, and adjusting a timing for a display changeover specification based on the scanning line number recited in claim 1

In response, the examiner respectfully disagrees. Faroudja discloses from col. 11 lines 54-col. 13 lines 14 that "Fig. 13....The 525- or 625-lineprogressively scanned video data may be provided for an advanced display output along with the

motion information and an indication that the data is 525 or 625 lines....converts 525-line video data to 625-line...scanned video data....525 or 625 line ...scanned video data may be provided for an advanced display output along with an indication that the data is 525 or 625 lines....Fig. 15.....decoding of an HDTV Hz.....multiplier 58 receives the video data from the advanced displayed output of a decoder.... Along with the 525/625 line indication signal....."shorter rise and fall times without preshoot and overshoot".....". Faroudja discloses acquiring a scanning line number from a range of 525 or 625 scanning lines being scanned on a display of HDTV. Faroudja also discloses different aspect ratio such as 4:3 or 16:9 which inherently has different scanning line number depending on the aspect ratio to reproduce images for small or widescreen display screen. Based on the scanning line number or aspect ratio, timing for a display will change.

3. Claims 2-5, 9-10, 12-15, 19-20 22-25 are rejected for the same reason as discussed in the corresponding paragraph 2 above.
4. In re page 20, applicant argues that Faroudja and Yokogawa fail to acquiring a scanning line value from a range of scanning lines being scanned on a display recited in claims 6, 16, 26, 36

In response, the examiner respectfully disagrees. Claims 6, 16, 26, 36 are rejected for the same reason as discussed in the corresponding paragraph 2 above.

5. In response, the examiner respectfully disagrees. Claims 7-8, 17-18, 27-30, 37-40 are rejected for the same reason as discussed in the corresponding paragraph 1 above.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 11, 21, 31 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,754,248 by Faroudja.
7. Regarding **claim 1**, a moving image reproduction system comprising a means for acquiring a scanning line number from a range of scanning lines being scanned on a display and means for adjusting a timing for a display changeover specification based on the scanning line number (fig. 15, col. 12 lines 33-col. 13 lines 14).
8. **Claims 11, 21, 31** are rejected for the same reason as discussed in corresponding system claim 1 above

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2-5, 9-10, 12-15, 19-20, 22-25, 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,754,248 by Faroudja in view of US Patent No. 6,396,874 by Kato.

10. Regarding **claim 2**, Faroudja discloses the means for acquiring the scanning line number comprises a timing adjuster that acquires a scanning line number from a range of scanning lines being scanned on display (fig. 15, col. 12 lines 33-col. 13 lines 14)

Faroudja fails to teach

- A frame buffer including a plurality of buffers
- A storage for storing compressed image data encoded in an image compression encoding scheme
- A video decoder for reading out compressed image data from storage, decoding compressed image data every one frame, and storing decoded image data into frame buffer
- An image storage buffer switch for switching between plurality of buffers every time the compressed image data for one frame is decoded and controlling so as to always store a previously decoded image and a currently decoded image into frame buffer
- A display controller for switching between plurality of buffers, to be displayed during a next vertical blanking period, after reception of display changeover specification and displaying image data on said display

Kato discloses (Fig. 3. Col. 9 lines 23-Col. 10 lines19, Fig. 17. Col. 26 line 66-Col. 27 line 40)

- A frame buffer including a plurality of buffers (Fig. 17 (43-46))
- A storage for storing compressed image data encoded in an image compression encoding scheme (Col. 9 lines 30-39)
- A video decoder for reading out compressed image data from storage, decoding compressed image data every one frame, and storing decoded image data into frame buffer (Col. 27 lines 10-25)
- An image storage buffer switch for switching between plurality of buffers every time the compressed image data for one frame is decoded and controlling so as to always store a previously decoded image and a currently decoded image into frame buffer (Col. 27 lines 26-34)
- A display controller for switching between plurality of buffers, to be displayed during a next vertical blanking period, after reception of display changeover specification and displaying image data on said display (Col. 27 lines 26-34)

Therefore, it would have been obvious to one of the ordinary skill in the art at the time of applicant's invention to modify the proposed combination of Faroudja's system to include plurality of buffers to store compressed image, switching system between plurality of buffers and display controller for switching, as taught by Kato, for advantage of providing buffer to store compressed image, decoder to read out compressed image,

switch for switching between plurality of buffers, and display controller for displaying changeover specification.

11. Regarding **claim 3**, Faroudja discloses timing adjuster acquires a current scanning line from display (fig. 15, col. 12 lines 33-col. 13 lines 14) but Faroudja fails to disclose display controller.

Kato discloses display controller (Fig. 17 (51)). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of applicant's invention to modify the proposed combination of Faroudja's system to include display controller, as taught by Kato, for advantage of providing controller to control switch between plurality of buffers to display different buffer to the user.

12. **Claims 4, 9, 12, 14, 19, 22, 24, 32, 34** are rejected for the same reason as discussed in corresponding system claim 2 above.

13. **Claims 5, 10, 13, 20, 23, 25, 33, 35** are rejected for the same reason as discussed in corresponding system claim 3 above

14. Claims 6, 16, 26, 36 are rejected under 35 U.S.C. 103(a) as being anticipated over U.S. Patent No. 6,463,210 by Yokogawa in view of U.S. Patent No. 5,754,248 by Faroudja

15. Regarding **claim 6**, Yokogawa discloses a moving image reproduction system comprising a means for acquiring, when one frame is divided into two fields for displaying, a display scanning line value from a range of scanning lines being scanned on a display and adjusting a timing of a display changeover specification to display one of two fields based on display scanning line value (Col. 4 line 1-19) but Yokogawa fails to disclose a scanning lines value from a range of scanning lines being scanned on a display

Faroudja discloses a scanning lines value from a range of scanning lines being scanned on a display (fig. 15, col. 12 lines 33-col. 13 lines 14)

Therefore, it would have been obvious to one of the ordinary skill in the art at the time of applicant's invention to modify the proposed combination of Yokogawa's system to include a range of scanning lines, as taught by Faroudja, to scan lines for displaying good quality of images in the screen.

16. **Claims 16, 26, 36** are rejected for the same reason as discussed in corresponding system claim 6 above.

17. Regarding **claim 15**, Kato discloses storing image data stores each frame in one of plurality of buffers (Col. 27 lines 9-25)

18. Claims 7-8, 17-18, 27-30, 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,463,210 by Yokogawa and U.S. Patent No. 5,754,248 by Faroudja in view of US Patent No. 6,396,874 by Kato.

19. Regarding **claim 7**, Yokogawa discloses the means for acquiring the scanning line number comprises a timing adjuster (Col. 3 line 49-Col. 4 lines 19), Faroudja discloses a scanning lines number from a range of scanning lines being scanned on a display (fig. 15, col. 12 lines 33-col. 13 lines 14)

Yokogawa and Faroudja fail to teach

- A frame buffer including a plurality of buffers
- A storage for storing compressed image data encoded in an image compression encoding scheme
- A video decoder for reading out compressed image data from storage, decoding compressed image data every one frame, and storing decoded image data into frame buffer
- An image storage buffer switch for switching between plurality of buffers every time the compressed image data for one frame is decoded and controlling so as to always store a previously decoded image and a currently decoded image into frame buffer
- A display controller for switching between plurality of buffers, to be displayed during a next vertical blanking period, after reception of display changeover specification and displaying image data on said display

Kato discloses (Fig. 3. Col. 9 lines 23-Col. 10 lines19, Fig. 17. Col. 26 line 66-Col. 27 line 40)

- A frame buffer including a plurality of buffers (Fig. 17 (43-46))
- A storage for storing compressed image data encoded in an image compression encoding scheme (Col. 9 lines 30-39)
- A video decoder for reading out compressed image data from storage, decoding compressed image data every one frame, and storing decoded image data into frame buffer (Col. 27 lines 10-25)
- An image storage buffer switch for switching between plurality of buffers every time the compressed image data for one frame is decoded and controlling so as to always store a previously decoded image and a currently decoded image into frame buffer (Col. 27 lines 26-34)
- A display controller for switching between plurality of buffers, to be displayed during a next vertical blanking period, after reception of display changeover specification and displaying image data on said display (Col. 27 lines 26-34)

Therefore, it would have been obvious to one of the ordinary skill in the art at the time of applicant's invention to modify the proposed combination of Yokogawa and Faroudja's system to include plurality of buffers to store compressed image, switching system between plurality of buffers and display controller for switching, as taught by Kato, for advantage of providing buffer to store compressed image, decoder to read out

compressed image, switch for switching between plurality of buffers, and display controller for displaying changeover specification.

20. Regarding **claim 8**, Yokogawa discloses timing adjuster acquires a current scanning line from display (Col. 4 lines 15-19), Faroudja discloses a scanning lines number from a range of scanning lines being scanned on a display (fig. 15, col. 12 lines 33-col. 13 lines 14) but Yokogawa and Faroudja fail to disclose display controller.

Kato discloses display controller (Fig. 17 (51)). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of applicant's invention to modify the proposed combination of Yokogawa and Faroudja's system to include display controller, as taught by Kato, for advantage of providing controller to control switch between plurality of buffers to display different buffer to the user.

21. **Claims 7, 17, 27, 29, 37, 39** are rejected for the same reason as discussed in corresponding system claim 7 above.

22. **Claims 8, 18, 28, 30, 38, 40** are rejected for the same reason as discussed in corresponding system claim 8 above

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIGAR CHOWDHURY whose telephone number is (571)272-8890. The examiner can normally be reached on 9 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NC
06/20/2008

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621